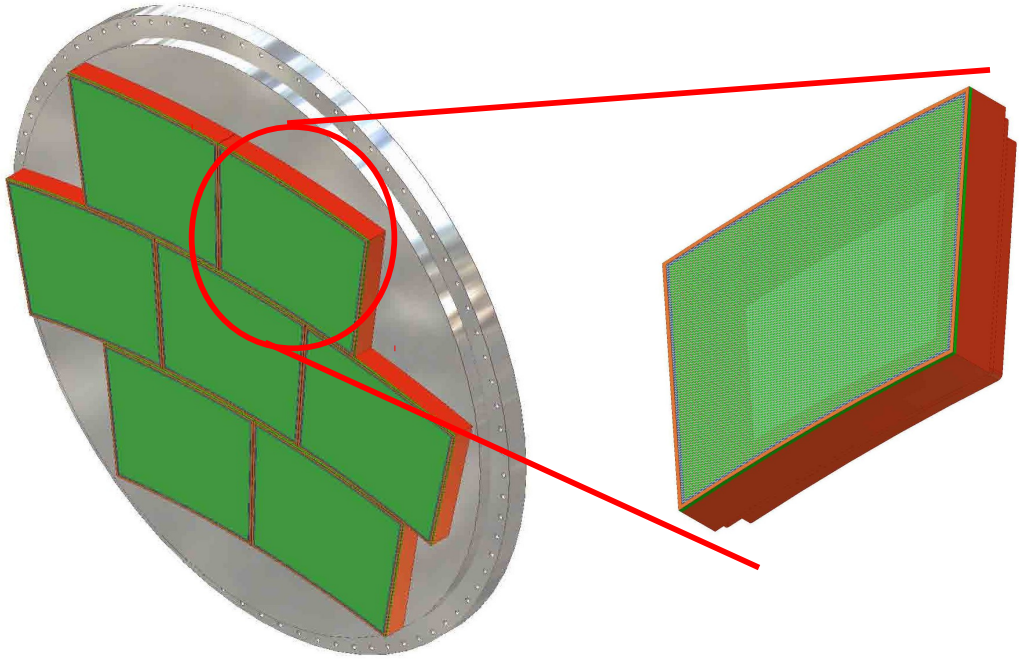
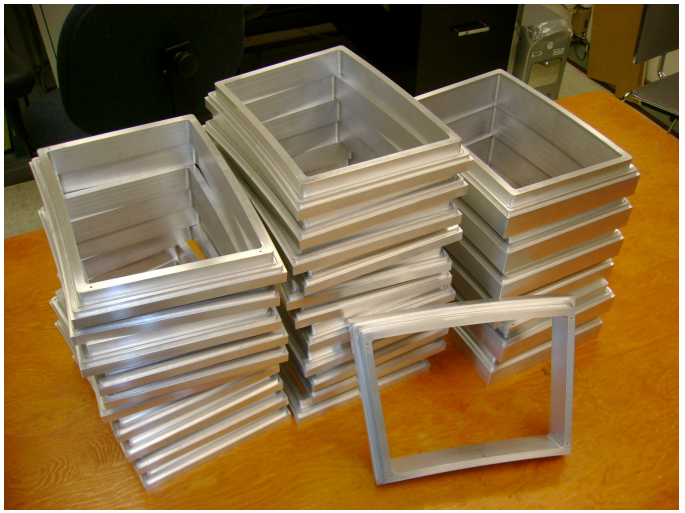
Discussion
Common Modules

DESY, 30.6.2014

universitätbonn

Currently: Common Modules sizes



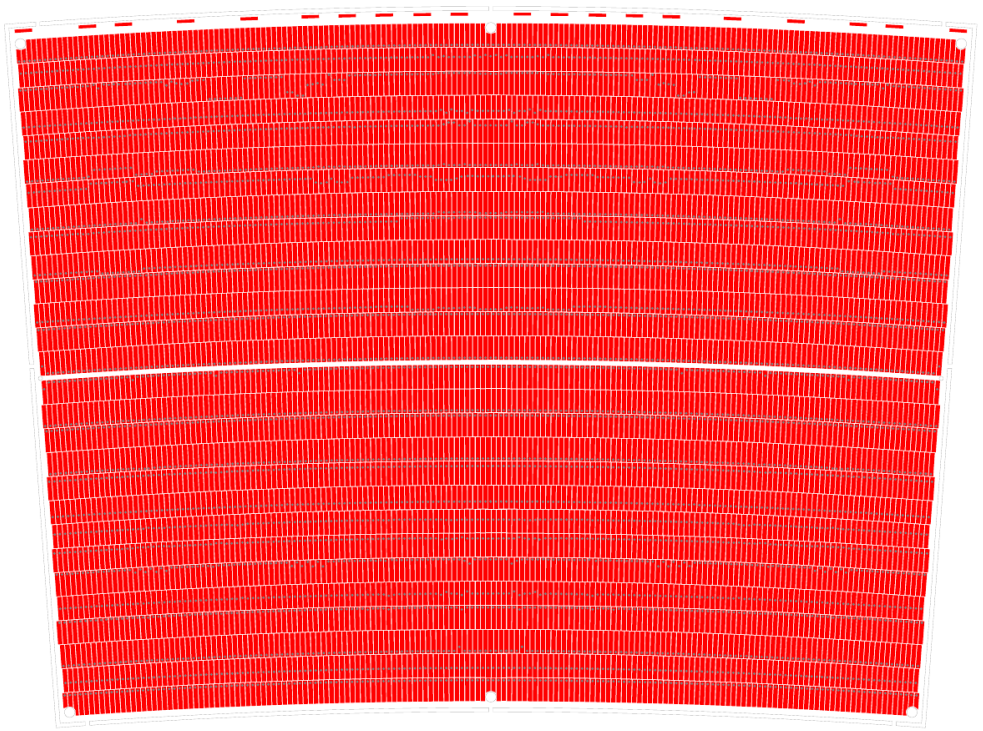


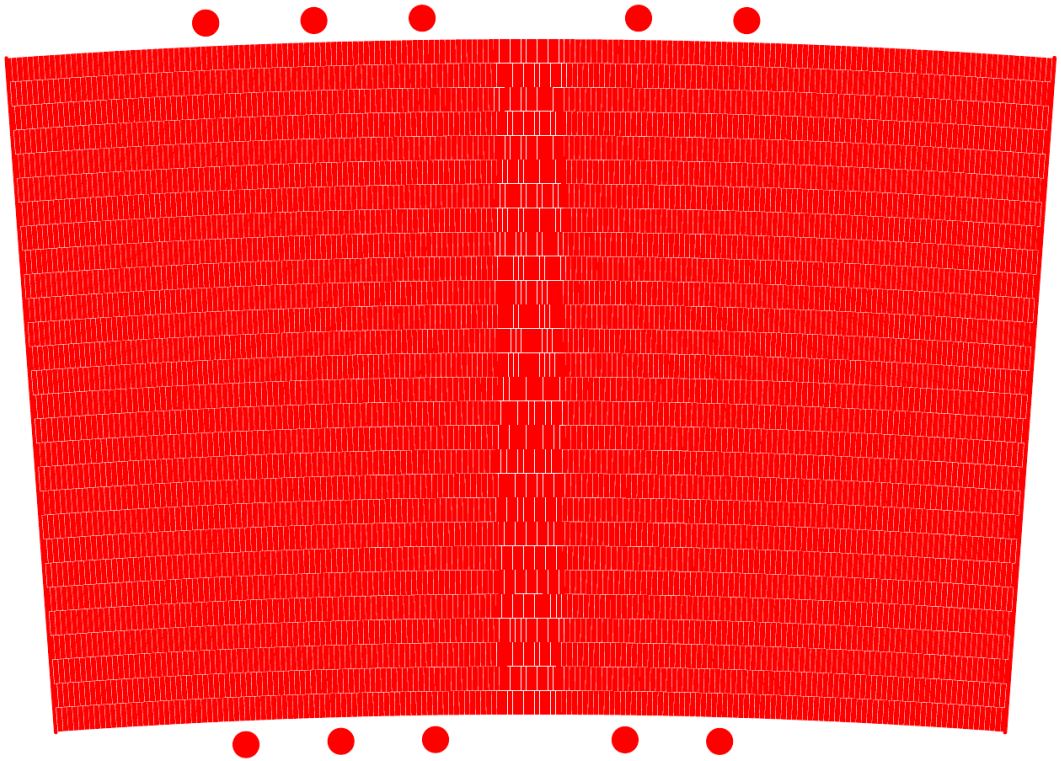
Modules have size of 22×17 cm²

And we have common electronics (more or less common)

But can we go further?

Common pad plane(I)





DESY modules:

1.26 × 5.85mm^2 pads - staggered

28 pad rows, 4829 channels per module

Thin frames – 1mm all around

20 HV connectors at top

Asian module:

1.2×5.4 mm^2 pads - staggered

28 pad rows (176-192 pads/row)

5152 pads per module

1 cm wide frames at top/bottom

No frames at sides

Common pad plane (II)

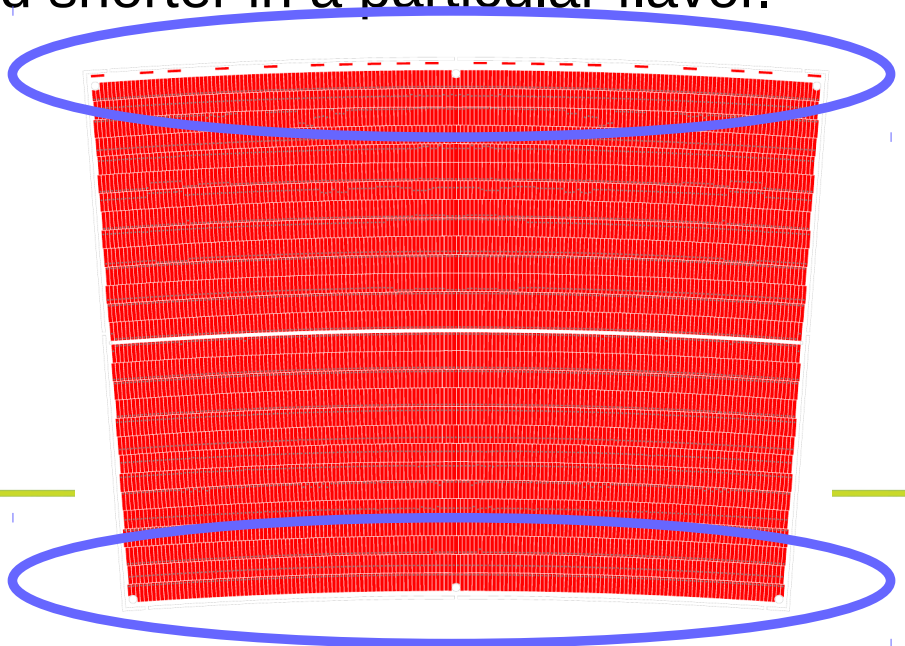
Micromegas Module

- 3×7 mm^2 large pads, 24 row with 72 pads → 1728 pads per module
- Grounding at border, 3 mm frames
- 1 HV contact in the center

Common pad plane?

- Number of pads given by SALTRO-16: 3200 => 1.26 * 8.8 mm^2 staggered?
- Maybe keep pads identical for all modules, but change the 2-3 mm of border area?

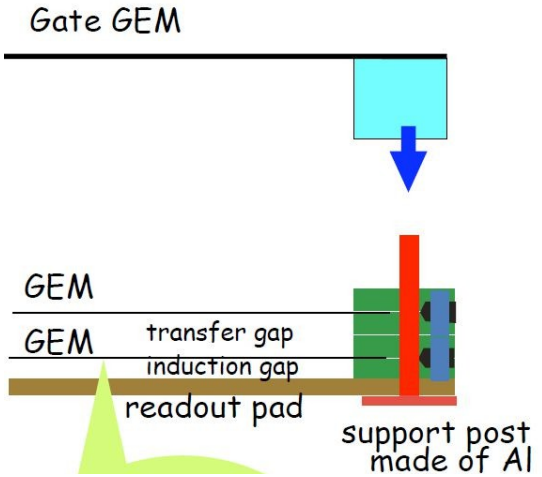
In case it is necessary, the outer pad rows could be covered by a frame, or they could be implemented shorter in a particular flavor.



universitätbonn

Gating device

Shall we foresee a gating device?
- How many HV connections?
- What distance from amplification stage?
- Do we need a field degrader?
- How much space do we need at the border?



What else?